



# Caltrans Garments Feature Fluorescent Color and Increase Safety

Fluorescent and neon colors were popular in the '80s, and Caltrans is bringing them back—for the safety of its workers. By outfitting field maintenance employees with personal protective equipment—including the addition of highly visible fluorescent colors with reflective striping—Caltrans seeks to improve their visibility, which increases the likelihood of returning home safely to their loved ones at the end of their workdays.

## Changing Safety Garments

The Code of Federal Regulations and the 2009 Manual on Uniform Traffic Control Devices require all Caltrans employees to wear American National Standards Institute (ANSI) compliant high-visibility safety apparel when exposed to the hazards of vehicular or equipment traffic. Field workers' vests, jackets, and shirts had for years been orange. But so were Caltrans vehicles and equipment. This created safety concerns that employees working near equipment would blend in with the equipment and not be visible. Caltrans then changed vests, jackets, and shirts to fluorescent yellow-green, the other accepted color for ANSI-compliant garments. In recent years, Caltrans has changed the color of its vehicles to white. Now workers can again wear the fluorescent orange commonly associated with Caltrans.

## Protecting Employees and Honoring Fallen Workers

New personal protective equipment for maintenance workers is more than a simple color change back to orange. The new garments also include safety enhancements. Caltrans also has new rain pants and jackets that are made of waterproof and breathable material with micro-prismatic reflective striping that is more visible in wet weather. The jackets have an opening in the back for fall-protection harnesses. Later this year, Caltrans will introduce safety pants with reflective striping for better worker visibility, sweatshirts, parkas, and bomber-style jackets. The new garments meet the ANSI high-visibility standards. And to honor its fallen workers, each shirt will have "CALTRANS REMEMBERS" on a black band on the left sleeve.

*Source: Division of Maintenance*



# New Fluorescent Orange Striping Improves Safety

**New style**

**Old style**

Safety—for transportation workers and the traveling public—is Caltrans' top priority. To improve visibility, and thereby the safety of its operations, Caltrans is upgrading its distinctive orange vehicle detection and identification striping to a more retroreflective, fluorescent orange striping. Higher retroreflectivity means more light from a vehicle's headlights reflects back to its source, making the material appear brighter and more visible to the driver. The striping material's fluorescent nature also offers an increase in daytime visibility.

Employees use the Caltrans fleet around-the-clock for road construction and maintenance and in different terrain, weather, and visibility conditions. Caltrans workers are often first responders to the scene of an incident. Making these vehicles more visible improves safety by reducing the chance they will be hit in a vehicle incident.

While higher retroreflectivity material will allow drivers to spot a Caltrans vehicle at a greater distance at night, fluorescent orange will offer optimum visibility during daylight, especially during low-light conditions such as dusk and dawn.

In addition to improved striping, Caltrans also will upgrade its logos and other decals that are an important part of a vehicle's overall visibility. National research has noted the importance of enhanced visibility and conspicuity of vehicles to elicit certain responses and actions from other drivers, for example, slowing down and moving over due to cognitive recognition.

Recent editions of the National Fire Protection Association standard for fire trucks recommends applying retroreflective striping and markings on fire trucks, including retroreflective markings on the inside of vehicle doors, to increase visibility and improve chances that a passing motorist sees that the door is open, and Caltrans also is adopting this practice.

Source: Division of Equipment

*Maintenance truck on the left features new striping.*

